AMENDMENT AND RESPONSE UNDER 37 CFR § 1.116

Serial Number: 09/216378

Filing Date: December 18, 1998

Title: NOISE REDUCTION SCHEME FOR A COMPUTER SYSTEM

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## IN THE CLAIMS

1. (Currently Amended) A personal computer comprising:

a built-in microphone for detecting ambient noise;

a noise cancellation module coupled to the microphone that generates a noise cancellation signal responsive to the detected ambient noise; and

a digital signal processor for mixing the noise cancellation signal with an audio signal provided from a desired source for provision to [[an]] a standard headphone compatible audio output connection to reduce headphone noise.

- 2. (Previously Presented) The personal computer of claim 1 and further comprising an optical disc drive for providing the audio signal.
- 3. (Previously Presented) The personal computer of claim 1 wherein the noise cancellation module comprises a software program running on a processor.
- 4. (Previously Presented) The personal computer of claim 1 wherein the microprocessor is the central processing unit for the computer system.
- 5. (Previously Presented) The personal computer of claim 1 wherein the digital signal processor is located on a sound board.
- 6. (Cancelled)
- 7. (Previously Presented) The personal computer of claim 1 wherein the computer system is a mobile computer.

8. (Currently Amended) A method of reducing ambient noise normally heard by a user through headphones when listening to audio provided via a mobile computer system, comprising:

detecting the ambient noise via a microphone built-in to the mobile computer system; generating a noise cancellation signal based on the detected ambient noise; and mixing the noise cancellation signal with the audio from the compact disc, wherein the mixed signal is applied to the headphonesa standard headphone compatible audio output connection to reduce the ambient noise in the headphones.

- 9. (Original) The method of claim 8 and further comprising converting the detected ambient noise to an electrical signal.
- 10. (Original) The method of claim\8 wherein detecting the ambient noise is performed using a built-in microphone within the mobile computer system.
- 11. (Original) The method of claim 8 wherein generation of the noise cancellation signal is done when the optical disc drive is active.
- 12. (Original) The method of claim 8 wherein generation of the noise cancellation signal is initiated manually via a software interface.
- 13. (Currently Amended) A machine readable medium having machine readable instructions stored thereon for causing a computer to perform the steps comprising:

detecting environmental background noise via a microphone built-in to the computer; converting the detected environmental background noise into an electrical signal; generating a noise cancellation signal based on the electrical signal; and mixing the noise cancellation signal with an audio signal for provision to [[an]] a standard headphone compatible audio output connection to reduce headphone noise.

- 14. (Original) The machine readable medium of claim 13 wherein the step of generating a noise cancellation signal is performed automatically when the optical disc drive is active.
- 15. (Original) The machine readable medium of claim 13 wherein the step of generating a noise cancellation signal is activated through a software interface.
- 16. (Currently Amended) A personal computer comprising:
  - a microprocessor;
  - memory coupled to the microprocessor;
  - a storage device coupled to the microprocessor;
  - a built-in microphone for detecting ambient noise;
- a noise cancellation module coupled to the microphone that generates a noise cancellation signal responsive to the detected ambient noise; and
- a digital signal processor for mixing the noise cancellation signal with an audio signal provided from a desired source for provision to [[an]] a standard headset compatible audio output connection to reduce headphone noise.
- 17. (Original) The personal computer of claim 16 and further comprising an integrated display device.
- 18. (Original) The personal computer of claim 17 wherein the personal computer comprises a mobile computer system having an integrated source of power.
- 19. (Original) The personal computer of claim\16 wherein the noise cancellation module is part of the microprocessor.
- 20. (Original) The personal computer of claim 17 wherein the personal computer comprises a mobile computer system and the noise cancellation module is provided by the microprocessor.
- 21. (Original) The personal computer of claim 1 wherein the audio source comprises a

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compact disc playing game or music sounds.

- 22. (Original) The personal computer of claim 1 wherein the noise cancellation signal is mixed with the audio signal to cancel ambient noise such that the audio signal is audible through a speaker coupled to the audio output connection.
- 23. (Original) The method of claim 8 wherein the audio from the compact disc comprises music.
- 24. (Previously Presented) A mobile computer comprising:

  a microphone integrated into the mobile computer for detecting ambient noise;

  a noise cancellation software module coupled to the microphone that generates a noise cancellation signal responsive to the detected ambient noise, and having a profile for compensating for keyboard key clicks detected by the microphone; and

a digital signal processor for mixing the noise cancellation signal with an audio signal provided from a desired source for provision to an audio output connection for a standard headset.

- 25. (Previously Presented) The mobile computer of claim 24 wherein the audio output connection comprises an analog output port.
- 26. (Previously Presented) The mobile computer of claim 25 and further comprising a digital to analog converter coupled between the digital signal processor and analog output port.
- 27. (Previously Presented) The mobile computer of claim 24 wherein the noise cancellation signal is generated when a source of audio output is activated.
- 28. (Cancelled)

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- 29. (Currently Amended). The personal computer of claim [[28]] 1 wherein said noise cancellation module generates the noise cancellation signal based on said ambient noise, said noise cancellation signal being generated in a format suitable to reduce headphone noise in the standard set of headphones connected via the audio output connection.
- (Currently Amended) The personal computer of claim [[29]] 1 wherein said headphone 30. noise comes from a same source as said ambient noise.